

## A review on ayurvedic management of Sandhivata with respect to Osteoarthritis

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### Abstract

Sandhivata (osteoarthritis), a degenerative disorder of the joints especially affecting weight bearing joints like knee joint, elbow joint etc. results in painful and restricted movement of the affected joint. Old age, malnutrition, obesity, working pattern, etc. are the contributing factors for manifestation of Sandhivata. Sandhivata has been mentioned in Ayurved under title of Vata Vyadhi. Various Ayurvedic formulations like *Kwatha*, *Guggulu Kalpana*, *Ghreeta*, *Taila*, *Gutika*, *Rasa Aushadhi* and *Panchakarma* procedures like, *Abhyanaga*, *Swedana*, *Basti*, *Janubasti*, *Rasayana therapy*, *Agnikarma* have been mentioned in classics for treatment of Sandhivata. Use of these various formulations and treatment modalities, considering *Vikara Prakruti*, *Vikara Adhithana* and *Vikara Sammutthana* can provide expected results in such joint deteriorating condition. An attempt has been done to review various formulations mentioned in Ayurveda classics for treatment of Sandhivata and tried to establish the guideline for rational use of these treatment modalities in specific pathological condition of Sandhivata, which may be useful for clinician and researcher for their clinical practice and future research plan respectively.

**Keywords:** Ayurvedic Treatment; *Vata Vyadhi*; Cartilage Lesions; Review

### 1. Introduction

*Sandhigata Vata* is one of *Vata Vyadhi* with symptoms such as *Sandhishoola* (joint pain) and *Sandhishopha* (swelling of joint). Osteoarthritis (OA) is degenerative joint disorder, representing failure of the diarthrodial (movable, synovial-lined) joint. OA of knee joint comes under the inflammatory group of disorders which is almost identical to *Sandhigata Vata* described in Ayurveda with respect to etiology, pathology, and clinical features. Osteoarthritis (OA) is the most common form of arthritis, which is degenerative in nature. It is characterized by progressive disintegration of articular cartilage, formation of new bone in the floor of the cartilage lesions (eburnation) and at the joint margins (osteophytes), and leads to chronic disability at older ages.<sup>[1]</sup> Clinical manifestations of OA range from mild to severe, and affect the joints in hands and weight bearing joints such as knees, hips, feet and spine. OA is a clinical syndrome characterized by joint pain, tenderness, limitation of movements, crepitus, occasional effusion and variable degrees of inflammation without systemic effects<sup>[2]</sup>. According to epidemiology, the prevalence of OA in India is 22-39%. Radiographic evidence of OA is present in majority of people over age 65; among them, 80% people are over 75 years. Approximately, 11% of those over 65 have symptomatic OA of the knee. In India, 5.3% males and 4.8% females are aged more than 65 years<sup>[3]</sup>. OA strikes women more often than men and it increases in prevalence, incidence and severity after menopause. The aetiology of OA is multi-factorial. Various morphological as well as biochemical changes result in a softened, ulcerated and malfunctioning articular cartilage<sup>[3]</sup>. It has been postulated that age, gender, body weight, repetitive trauma and genetic factors are the risk factors which play an important role in the manifestation of OA<sup>[4]</sup>. Sushruta has described the disease in *Vata Vyadhi* chapter under the heading of *Sandhigata Vata*, while Charaka has described *Sandhigata Vata* under the *Vata Vyadhi* as *Sandhigata Anila* (*Anila* is a synonym of *Vata*)<sup>[5]</sup>. The diseases produced by morbid *Vata-Dosha*

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are more common in Jaravastha (old age). The vitiated Vata combines with other vitiated Dosha, Rakta, Ama, etc. and gets located in the joint to produce the disease. Being a disease related to *Madhyama-Roga-Marga*, Sandhigata Vata is either Kasta-sadhya (difficult to treat) or Asadhya (Impossible to treat). On the basis of symptomatology and nature of the disease, *Sandhigata Vata* is much similar to OA, which is the most common degenerative joint disease in older people.

### *Aim and Objective*

To review the various treatment modalities mentioned in Ayurved for treatment of Sandhivata and to establish evidence-based guideline for its rational utility.

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## 2. Material and Methods

Charaka Samhita, Sushruta Samhita, Astanga Hridaya and Samgraha, Yogaratnakar, Bhavaprakash and Sharangadhar Samhita Chakradatta, Bhaishajya Ratnavali and other relevant modern books, published articles on Sandhivata or Osteoarthritis and internet sources were used to review the treatment approaches mentioned to manage osteoarthritis or Sandhivata.

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## 3. Results and Discussion

Sandhivata is a Vata Vyadhi occurring due to vitiation of vata ether due to consumption of Vata-Vardhaka Ahara and Vihara or due to avarana of vata.

Various therapeutic measures mentioned for Sandhivata are based on its pathogenesis mechanism. The patients of Sandhivata on bases of their pathology can be broadly divided in three categories;

- Bahu Doshaja Sandhivata (Sandhivata occurring due to excessive morbid Dosha)
- Madhyama Doshaja Sandhivata
- Alpa Doshaja Sandhivata Treatment plan according to above categories;
- Nidana Parivarjana

### 3.1. Pathya Apathya

#### 3.1.1. Pathya Aahara

Godhuma, Mamsa, Raktashali, Godugdha, Ajadugdha, Ghrita, Draksha, Ama, Madhuka, Ushna Jala, Sura, Surasava, Madhura – Amla – Lavana Rasa pradhana ahara.

#### 3.1.2. Pathya Vihara

Atapa Sevana, Mridu Shayya, Ushnodaka Snana etc.

#### 3.1.3. Apathya Aahara

Yava, Kodrava, Chanaka, Kalaya, Sheeta Jala, Ati Madya Pana, Sushka Mamsa, Katu-Tikta Kashaya Rasa pradhan aahara.

#### 3.1.4. Apathya Vihara

Chinta, Ratri Jagarana, Vega Vidharana, Shrama, Anashana, Vyavaya, Vyayama, Chankramana, Kathina Shayya.

- Bahu Doshaja Sandhivata: Samshodhana
- Madhyama Doshaja Sandhivata: Langhana, Pachana and Shamana
- Alpa Doshaja Sandhivata: Langhana and shaman therapy

Samsodhana Therapy Osteoarthritis or Sandhivata mainly occurring due to obesity having Bahu Dosha condition requires Samshodhana.

Following Panchakarma treatment can be effective for treatment of Sandhivata of obese patients;

- **Vamana:** By Madanaphala Pippali Yoga

- **Virechana:** Abhayadi Modak and Trivruta Avaleha, Argavdhadi Kashaya, Triphala Kashaya
- **Asthapana Basti:** Dashamuladi Niruhabasti, Erandamuladi Niruha Basti
- **Raktamokshana Therapy:** If there is involvement of Rakta Dhatu in Samprapti of Sandhivata, RaktaMokshana by Jalauka (Blood-letting through leech) from affected joint can provide instant relief in pain and help to break down pathology.

### 3.2. Agnikarma Therapy

Patients of osteoarthritis having severed joint pain can be treated effectively by Agnikarma on affected joint with Pancha Dhatu Loha Shalaka. A research work conducted by Nilesh Jethava et al entitled 'Role of Agnikarma in Sandhigata Vata (osteoarthritis of knee joint)' concluded that Agnikarma (therapeutic heat burn) provides instant relief from pain by balancing local Vata and Kapha Dosha without any untoward effects. *Loha Shalaka* provided better result in pain relief than *Rajata Shalaka*<sup>[6]</sup>.

### 3.3. Shamana Therapy

After Shodhana or proper Langhana and Pachana, Shamana therapy can effectively manage the remaining symptoms.

### 3.4. Drugs used for Pachana or Agnidipana in patients of Sandhivata:<sup>[7]</sup>

- Rasna
- Lasuna
- Panchatikta Dravya Kashaya
- Agnitundi Vati
- Sanjivani Vati
- Lasunad Vati
- Hingvastaka Churna
- Shivakshara Pachana Churna etc can be used to correct Agni before starting the Shamana therapy

### 3.5. Drugs Used as Shamana therapy for Treatment of Sandhivata

#### 3.5.1. Guggulu Kalpana

Laksha Guggulu, Abha Guggulu, Yogaraja Guggulu, Panchatikta Guggulu, Rasnadi Guggulu, Gokshuradi Guggulu, Mahayogaraja Guggulu, Tryodashanga Guggulu, Saptavinshati Guggulu.<sup>[8]</sup>

#### 3.5.2. Sneha Kalpana

Dashmuladi taila, Rasna taila, Nirgundi taila, Lashunadi taila, Panchatikta ghruta.<sup>[9]</sup>

#### 3.5.3. Kwatha

Dashamula Kwatha, Rasnasaptak Kwatha, Phalatrikadi Kwatha, Maharasnadi Kwatha, Punarnavashtak Kwatha, Punarvashtak Kwatha, Gokshuradi Kwatha.<sup>[10]</sup>

#### 3.5.4. Rasa Aushadha

Navajivana rasa, Godanti Bhasma, Muktaashukti Bhasma, Bruhatavatchintamani rasa, Vatavidhvansa rasa.<sup>[11]</sup>

### 3.6. Rational Use of above Mentioned Formulation in Treatment of Sandhivata

According to Sadvidhakriyakala of Sandhivata, the use of above-mentioned treatment modalities can be effective, if used properly.

- Mild severity of symptoms of Sandhivata having less degeneration of cartilages of joints is a condition occurring due to Kostha Dusti. These types of patients have joint pain when they have flatulence or indigestion. They can be treated effectively with Panchavidha Kashaya kalpana like, Kwath, Churna etc. mentioned above.
- Moderate severity of symptoms having moderately degeneration of cartilages of joints resulting in crepitating sound on movement of joint is a condition of Shakaha Dushti and should be managed with Sneha kalpana like

Ghrita, Taila etc. Anuvasan Basti with Panchtikta Taila, Nirgundi tail and Matrabasti with Tila taila, Eranda taila etc can also be beneficial to manage this condition.

- Severe degeneration of joints leading to unbearable pain and other symptoms like restricted movement of joint, inflammation etc are due to involvement of Marma-asthi-sandhi (Madhyama Roga-marga) in pathogenesis of Sandhivata, which requires fast acting and Sukshama Guna, Vyavayi Guna dominant drugs, which can easily reach to micro channels of bone nutrition and show its effect to reduce the symptoms. The Guggulu kalpana and Ras-Aushadh should be used for such type of pathological condition of Sandhivata.
- Rasayana Aushadha like Pravala-pisti, Mukta Shukti, Godanti Bhasma, Hiraka Bhasma etc being good source of calcium, should be used having malnutrition and osteoporosis condition associated with Sandhivata.

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#### 4. Conclusion

Osteoarthritis or Sandhivata, according to its progressive condition require specific treatment to get cured. Panchavidha kashaya kalpana can be effective in Kosta-gata or primary condition of Sandhivata, Sneha Kalpna can be useful in Shakhagata or moderately degenerative condition of Sandhivata and Guggulu kalpana as well as Rasa Aushadhi can effectively treat the terminal or Marma-asthi-Sandhigata stage of Sandhivata. Selection of drug for treatment of Sandhivata on bases of its Kriyalakala can provide accurate and instant result to get rid from this disease.

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#### Compliance with ethical standards

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##### *Disclosure of conflict of interest*

The authors declare that there was no conflict of interest regarding the publication of manuscript.

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#### References

- [1] Guccicone AA, Felson DT, Anderson JJ, Anthony JM, Zhang Y, et al. (1994) The effect of specific medical condition on the functional limitations of elders in the Framingham study. *Am J Public Health* 84(3): 351- 358.
- [2] Keuttner KE, Goldberg VM (1995) Introduction. In: Kuettner, KE, et al. *Osteoarthritis disorders*. Rosemont IL. American Academy of Orthopaedic Surgeons, pp: 21-25.
- [3] Sharma MK, Swami HM, Bhatia V, Verma A, Bhatia SP, et al. (2010) An Epidemiological study of correlates of osteo-arthritis in geriatric population of UT Chandigarh. *Indian J Community Med* 32(1): 77-78.
- [4] Pai XC, Rymer WZ, Chang RW, Sharma L (1997) Effect of age and osteoarthritis on knee proprioception. *Arthritis Rheum* 40(12): 2260-2265.
- [5] (2008) *Charaka Samhita with Hindi translation by Brahmanand Tripathi, ChaukhambaVaranasi: Surbharati Prakashan*, pp: 940.
- [6] Jethava NG, Dudhamal TS, Gupta SK (2015) Role of Agnikarma in Sandhigata Vata (osteoarthritis of knee joint). *Ayu* 36(1): 23-28.
- [7] Grampurohit PL, Rao N, Harti SS (2014) Effect of Anuvasana Basti with Ksheerabala Taila in Sandhigata Vata (Osteoarthritis). *Ayu* 35(2): 148-151.
- [8] Gupta PK, Samarakoon SM, Chandola HM, Ravishankar B (2011) Clinical evaluation of *Boswellia serrata* (Shallaki) resin in the management of Sandhivata (osteoarthritis). *Ayu* 32(4): 478-482.
- [9] Akhtar B, Mahto RR, Dave AR, Shukla VD (2012) Clinical study on Sandhigata Vataw.s.r. to Osteoarthritis and its management by Panchatikta Ghrita Guggulu. *Ayu* 31(1): 53-57. *Journal of Natural & Ayurvedic Medicine Padhar*

B and Jaiman D. Evidence Based Ayurvedic Treatment Guideline for Management of Sandhivata (Osteo-arthritis). J Nat Ayurvedic Med 2019, 3(4): 000212. Copyright© Padhar B and Jaiman D. 6

- [10] Shah MR, Mehta CS, Shukla VD, Dave AR, Bhatt NN (2010) A Clinical study of MatraVasti and an ayurvedic indigenous compound drug in the management of Sandhigata Vata (Osteoarthritis). Ayu 31(2): 210-217.
- [11] Rajoria K, Singh SK, Sharma RS, Sharma SN (2010) Clinical study on LakshaGuggulu, Snehana, Swedana& Traction in Osteoarthritis (Knee joint). Ayu 31(1): 80-87.

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